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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Karoleen B. Alexander

Examiner: Parsley, David

USSN: 10/757,116

Group Art Unit: 3643

Filed: January 14, 2004

Confirmation No. 2947

For:

A MULTI-LAYERED STRUCTURE

July 11, 2006

FOR TREE WELL SKIRTS AND SIDEWALKS AND METHOD OF

**MAKING SAME** 

Costa Mesa, California 92626

#### APPEAL BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with applicant's Notice of Appeal filed on April 7, 2006 and 37 C.F.R. § 1.192, three copies of this brief are filed herewith along with the requisite fee set forth in 37 C.F.R. § 1.17(f).

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### **REAL PARTY IN INTEREST**

The real party in interest is the applicant, Karoleen B. Alexander.

## RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

#### STATUS OF CLAIMS

Claims 1-40 remain in the application. Claims 22-40 stand withdrawn.

Claim 1 stands rejected under 35 U.S.C. §103(a) as unpatentable over *Byrne* (US 5,396,731) in view of *Tsao et al* (US 5,678,353).

Claims 2, 3, 6-11, 12/10, 12/11, 13, 14 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Byrne* and in view of *Tsao et al* and *Farley* (US 5,730,773).

Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Byrne* in view of *Tsao et al*, *Farley* and *Stella* (US 4,882,386).

Claims 15-18 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Byrne* in view of *Tsao et al* and *Stella*.

Claims 19-21 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Byrne* in view of *Tsao et al* and *Schuurink et al* (US 4,205,102).

### STATUS OF AMENDMENTS

No amendments were filed after the Final rejection of February 10, 2006.

#### SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention is a tree well or sidewalk structure having a base layer 16 (page 7, paragraph 20) of rubber and a first binder, and a wear layer 17 (page 8, paragraph 23) of ethylene propylene diene monomer (EPDM) and a second binder, on top of the base layer 16. The base layer rubber is preferably butadiene rubber (page 7, paragraph 20) but could be recycled tires (page 8, paragraph 22) or industrial rubber (page 8, paragraph 22). The preferred binder for the base layer 16 is isocyanate polyurethane (page 7, paragraph 20). The ratio of the binder to rubber in the base layer 16 is 16% by weight (page 18, paragraph 42). The rubber could be in granular form (page 13, paragraph 36) wherein the granule size varies in the range of 1.8 mm to 6 mm (page 13, paragraph 36). The rubber could be in the form of buffings or peelings, or both (page 13, paragraph 36). The rubber could be a mixture of buffings, peelings, and granules (page 13, paragraph 30) in a ratio of 70% granules and 30% peelings and/or buffings (page 13, paragraphs 39, 40). For the tree structure, a mixture of 50% granules and 50% peelings or buffings is preferred (page 13, paragraph 30). The binder in the wear layer 17 is preferably isocyanate polyurethane (page 8, paragraph 23). The preferred ratio of binder to EPDM in the wear layer 17 is 20% by weight (page 18, paragraph 43). The EPDM in the wear layer is in granular form with the granules ranging in size from 1.8 mm to 6 mm in diameter (page 15, paragraph 43). The wear layer may contain aliphatic diisocyanate when color is to be added to the wear layer (page 15, paragraph 44).

#### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Pursuant to applicant's Notice of Appeal filed on April 7, 2006, under 37 CFR §41.3, applicant appeals from the Final Rejection of February 10, 2006. On April 7, 2006 applicant filed a Pre-Appeal Brief Request for Review which was acted upon by the Review Panel on May 11, 2006, referring applicant to the Board of Patent Appeals and Interference for relief. Applicant requests review of the following grounds of rejection:

- 1. Whether claim 1 is unpatentable under 35 U.S.C. §103(a) over *Byrne* (US 5,396,731) in view of *Tsao et al* (US 5,678,353).
- 2. Whether claims 2, 3, 6-11, 12/10, 12/11, 13 and 14 are unpatentable under 35 U.S.C. §103(a) over *Byrne* in view of *Tsao et al* and *Farley* (US 5,730,773).
- 3. Whether claims 4 and 5 are unpatentable under 35 U.S.C. §103(a) over Byrne in view of Tsao et al, Farley and Stella (US 4,882,386).
- 4. Whether claims 15-18 are unpatentable under 35 U.S.C. §103(a) over Byrne in view of Tsao et al and Stella.
- 5. Whether claims 19-21 are unpatentable under 35 U.S.C. §103(a) over Byrne in view of Tsao et al and Schuurink et al (US 4,205,102).

#### ARGUMENT

# 1. Rejection Of Claim 1 As Unpatentable Over *Byrne* in View of *Tsao* et al.

Byrne is directed to a mulch pad for placing around the trunk of a tree. The pad is made from rubber granules ground from used tires. The granules are in the range of 1/4 inch to 3/4 inch in size. These rubber granules are mixed with a latex or urethane binder, the preferred binder being a polyurethane number 2040. The pad is preformed or pourable on site, and is preferably about 1 inch thick with a 2 inch central receiving aperture for the trunk.

Byrne discloses a second, alternate embodiment for a larger tree pad 31, shown in Figure 8. This pad 31 has an internal mesh layer 30 made of fiberglass, nylon or polyethylene. The internal mesh layer 30 is surrounded by the pad material of rubber granules and polyurethane binder.

Tsao et al is directed to a grass guard for forming a border around a lawn sprinkler head. This sprinkler head grass guard is a two layer structure. The bottom layer 3 is a heavy grit or powder contained within a uniform polymer body which may be ethylene propylene diene monomer (EPDM), among many other materials. The top layer 2 is a separate low cost pre-manufactured woven plastic turf sheet which has a color and a surface texture that is close to grass.

The present invention is a tree skirt or a sidewalk structure which has two layers. A base layer of rubber and a binder and a top wear layer of ethylene propylene diene monomer (EPDM) and a binder.

The combination of *Byrne* and *Tsao et al* as suggested in the Office Action or in any other manner, simply fails to show, teach or infer the present claimed invention. The most that *Byrne* teaches is a tree well skirt made out of rubber and a binder. In his alternative embodiment, the tree well skirt is made out of rubber and a binder with an internal mesh layer of fiberglass, nylon or polyethylene. *Tsao et al* shows a grass guard for a sprinkler head that has a bottom layer of EPDM as one of many material choices to encase a heavy grit material, like sand, with a top layer of low density polyethylene, colored and textured to match grass.

Neither *Byrne* nor *Tsao et al* show, teach or infer the use of a wear layer of EPDM with a binder on top of a base layer of rubber and a binder. *Tsao et al's* EPDM material is used as a bottom layer, a plastic compliant body for encasing heavy grit or powder. There simply is no suggestion in *Tsao et al* to use EPDM as a wear layer for a grass guard or tree well skirt. *Byrne's* teaching of using an internal, encased, mesh layer for larger tree well skirts actually teaches away from a top wear layer.

# 2. Rejection Of Claims 2, 3, 6-11, 12/10, 12/11, 13, and 14 As Unpatentable Over *Byrne* in View of *Tsao et al* and *Farley*.

Farley is directed to a chemical dispensing device which is a natural rubber shaped into a rope-like form and saturated with a commercial fertilizer. Farley notes that there are many other natural and synthetic rubber materials that could be used instead of natural rubber. One of these could be butadiene rubber. The rubber material is chosen for its high susceptible to bloom and its solubility with many different fertilizer compounds, in order to provide a controlled release of the fertilizer compounds into the environment.

Applicant reasserts here the arguments made above for the patentability of claim 1 over the combination of *Byrne* and *Tsao et al.* 

#### Claims 2, 3 and 6-9

Farley utilizes his butadiene rubber rope as a dispensing agent for fertilizer. Farley does not even contemplate a multiple layer structure having a base layer. The combination suggested in the Final rejection, let alone any combination of Byrne, Tsao et al and Farley, would not lead to the claimed invention.

#### Claims 10, 11, 12/10 and 12/11

The Office Action concedes that the precise quantity of rubber granules to rubber peelings or buffings recited in the claims are not shown in any art of record. The Office Action then proclaims that these limitations are "limitations found through experimentation and it would been obvious to one of ordinary skill in the art to take the device of *Byrne* as modified by *Tsao et al* and *Farley* and add the mixture of either 50 or 70% buffings and either 30 or 50% peelings or buffings."

Applicant respectfully submits there is simply no reason for any person of ordinary skill in the art reading *Byrne*, *Tsao et al* and *Farley* to come up with applicant's claimed structure, let alone the precise mixture of granules to peelings or buffings recited in the claims.

#### Claims 13 and 14

The Office Action concedes that none of the references of record disclose a structure which has a base layer that is 1 ½ to 3 ½ inches, thick or 2 inches thick. The

Office Action then concludes that because these limitations, "are found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of *Byrne* as modified by *Tsao et al* and *Farley*, and add the base layer of 1 ½ to 3 ½ inches or 2 inches thick."

Applicant respectfully submits that a person of ordinary skill in the art reading Byrne, Tsao et al and Farley would have no motivation to make the claimed invention, let alone make the claimed invention with a base layer that is 1 ½ to 3 ½ or 2 inches thick.

Byrne specifically teaches that his pad should preferably be 1 inch thick.

3. Rejection of claims 4 and 5 as Unpatentable Over *Byrne* in View of *Tsao et al, Farley* and *Stella*.

Applicant reasserts here the arguments set forth above for the patentability of claim 1 over *Byrne* in view of *Tsao et al* and the patentability of claim 2 over *Byrne* in view of *Tsao et al* and *Farley*.

Stella is directed to a composition for an adhesive to bind sheets of EPDM together. Specifically, Stella recommends the use of an adhesive that is a combination of neoprene and isocyanate, or simply polyurethane.

#### Claim 4

The Office Action recognizes that none of the references of record disclose the use of isocyanate polyurethane as a binder for a rubber base layer. The Office Action, nevertheless asserts "Stella does disclose the binder is isocyanate polyurethane—see for example column 9, lines 19-26." These lines of Stella show that Stella is utilizing

a mixture of neoprene with isocyanate, as an adhesive, or polyurethane by itself, as an adhesive. No combination of isocyanate polyurethane is mentioned as a binder, or as a glue, for that matter.

#### Claim 5

The Office Action admits that no reference of record discloses the ratio of binder to rubber in the base layer to be 16% by weight. The Office Action nevertheless asserts, "this limitation is found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of *Byrne* as modified by *Tsao et al*, *Farley* and *Stella* and add the ratio of binder to rubber being 16% by weight."

The applicant respectfully submits that no person or ordinary skill in the art reading *Byrne*, *Tsao et al*, *Farley* and *Stella* would produce the claimed invention, let alone come up with the specific ratio of binder to rubber recited in the claim.

# 4. Claims 15-18 as Unpatentable Over *Byrne* in View of *Tsao et al* and *Stella*.

Applicant reasserts here the arguments set forth above for the patentability of claim 1 over *Byrne* in view of *Tsao et al* and the patentability of claims 4 and 5 over *Byrne* in view of *Tsao et al*, *Farley* and *Stella*.

# 5. Claims 19-21 as Unpatentable Over *Byrne* in View of *Tsao et al* and *Schuurink et al.*

Schuurink et al is directed to a method and substance for coating a cured rubber substrate. The coating contains a binder composition of a polyol compound plus a poly isocyanate which is preferably an aliphatic diisocyanate.

The Office Action asserts that "it would have been obvious to one of ordinary skill in the art to take the device of *Byrne* as modified by *Tsao et al* and add the binder containing aliphatic diisocyanate of *Schuurink et al*." The binder of *Schuurink et al* is a polyol compound plus an aliphatic diisocyanate.

Even if *Schuurink et al's* binder were combined with the multi-pad of *Byrne*, and modified by *Tsao et al*, a person of ordinary skill would not be led to produce a wear layer of ethylene propylene diene monomer with a binder container aliphatic diisocyanate.

#### **CONCLUSION**

Applicant respectfully submits that the Final Office Action has not established a *prima facie* case of obviousness and the assumptions and the reconstruction of references do not constitute a disclosure of prior art. *In re Rijckaert*, 28 U.S.P.Q. 2d 1955, 1956 (CAFC 1993):

In rejecting claims under 35 U.S.C. §103m the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q. 2d 1443, 1445 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. Id. 'A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person or ordinary skill in the art.' In Re Bell, 991 F.2d 781, 782, 26 U.S.P.Q. 2d, 1529, 1531 (Fed. Cir. 1993) (quoting In Re Reinhart, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (CCPA 1976)). If the examiner fails to establish a prima facie case the rejection is improper and will be overturned.

\* \* \*

Rije hert argues that the examiner has not established a prima facie

of obviousness and that the examiner's assumptions do not constitute a disclosure of prior art. We agree.

Applicant respectfully requests that all the rejections of record be reversed and this application passed to issue.

I certify that this document and fee is being deposited on November 4, 2005 with the U.S. Postal Service "Express Mail Post Office to Addressee" service as Express Mail No. EV632761906US under 37 C.F.R. 1.10 and is addressed to Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

Respectfully submitted,

SNELL & WILMER L.L.P.

By: Marc Fregoso

Marc Dugoto

Signatore

Dated: July 11, 2006

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#### **CLAIMS APPENDIX**

- 1. A structure for use as a tree well skirt or sidewalk, comprising:
  - a base layer of rubber and a first binder; and;
- a wear layer of ethylene propylene diene monomer (EPDM) and a second binder on top of the base layer.
- 2. The structure of claim 1 wherein the rubber of the base layer is butadiene rubber.
- 3. The structure of claim 2 wherein the butadiene rubber is recycled vehicle tires or industrial rubber.
- 4. The structure of claim 2 wherein the first binder is isocyanate polyurethane.
- 5. The structure of claim 4 wherein the ratio of the first binder to butadiene rubber in the base layer is 16% by weight.
- 6. The structure of claim 2 wherein the butadiene rubber is in granular form.
- 7. The structure of claim 6 wherein the rubber granules of butadiene rubber are in the range of 1.5 mm to 6 mm, inclusive.
- 8. The structure of claim 3 wherein the butadiene rubber is in the form of peelings or buffings.
- 9. The structure of claim 2 wherein the butadiene rubber is in the form of a mixture of granules and peelings or buffings.
- 10. The structure of claim 9 wherein the mixture of granules to peelings or buffings is 70% granules and 30% peelings or buffings.

- 11. The structure of claim 9 where the mixture of granules to peelings or buffings is 50% granules and 50% peelings or buffings.
- 12. The structure of claim 10 or 11 wherein the butadiene rubber is recycled vehicle tires or industrial rubber.
- 13. The structure of claim 2 wherein the base layer is one and one-half to three and one-half inches thick.
  - 14. The structure of claim 2 wherein the base layer is two inches thick.
- 15. The structure of claim 1 wherein the second binder of the wear layer is isocyanate polyurethane.
- 16. The structure of claim 15 wherein the ratio of the second binder to EPDM is 20% by weight.
  - 17. The structure of claim 16 wherein the EPDM is granular.
- 18. The structure of claim 17 wherein the granules are in the range of 1.5 mm to 6 mm in diameter, inclusive.
- 19. The structure of claim 1 wherein the binder of the wear layer contains aliphatic diisocyanate.
- 20. The structure of claim 19 wherein the EPDM is granular and the granules are in the range of 1.5 mm to 6 mm in diameter, inclusive.
- 21. The structure of claim 1 wherein the base layer is two inches to three inches thick and the wear layer is three-eighths to one-half inch thick.
- 22. (Withdrawn) A method of forming a tree well skirt, the steps of the method comprising:

mixing butadiene rubber and a binder to form a pourable slurry;

pouring the slurry of rubber and binder in place around a tree to form the base layer of a tree well skirt;

mixing ethylene propylene diene monomer (EPDM) and a binder to form a pourable slurry;

pouring the slurry of EPDM and binder in place over the base layer to form a wear layer; and

leveling the poured ethylene propylene diene monomer and binder slurry.

- 23. (Withdrawn) The method of claim 22 wherein the pouring rubber and binder step include pouring a base layer that is one and one-half to three and one-half inches thick.
- 24. (Withdrawn) The method of claim 23 where the pouring EPDM and binder step include pouring a wear layer that is three-eighths to one-half inch thick.
- 25. (Withdrawn) The method of claim 22 wherein the rubber in the base layer is a butadiene rubber recycled from vehicle tires to industrial rubber and the binder is isocyanate polyurethane.
- 26. (Withdrawn) The method of claim 25 wherein the binder in the wear layer is isocyanate polyurethane.
- 27. (Withdrawn) The method of claim 22 wherein the butadiene rubber is in the form of granules or peelings or buffings.

- 28. (Withdrawn) The method of claim 22 wherein the butadiene rubber is a mixture of granules and peelings or buffings at a ratio of 50% granules and 50% peelings or buffings.
- 29. (Withdrawn) The method of claim 27 or 28 wherein the granules are in the range of 1.5 mm to 6 mm in diameter, inclusive.
- 30. (Withdrawn) The method of claim 22 wherein the EPDM granules are in the range of 1.5 mm to 6 mm in diameter, inclusive.
- 31. (Withdrawn) A method of forming a sidewalk for use around trees, the steps of the method comprising:

preparing a form to outline the sidewalk;

preparing a leveling layer of porous composite material in the form;

mixing butadiene rubber and a binder to form a pourable slurry;

pouring the slurry of rubber and binder in place in the form or the leveling layer to form the base layer of the sidewalk;

leveling the poured rubber and binder slurry;

mixing ethylene propylene diene monomer (EPDM) and a binder to form a pourable slurry;

pouring the slurry of EPDM and binder in place over the base layer to form a wear layer; and

leveling the poured EPDM and binder slurry.

- 32. (Withdrawn) The method of claim 31 wherein the pouring rubber and binder step includes pouring a base layer that is two inches to three inches thick.
- 33. (Withdrawn) The method of claim 32 wherein the pouring EPDM and binder step includes pouring a wear layer that is three-eighths to one-half inch thick.
- 34. (Withdrawn) The method of claim 31 wherein the rubber in the base layer is a butadiene rubber recycled from vehicle tires or industrial rubber and the binder is isocyanate polyurethane.
- 35. (Withdrawn) The method of claim 34 wherein the binder in the wear layer is isocyanate polyurethane.
- 36. (Withdrawn) The method of claim 34 wherein the binder in the wear layer contains aliphatic diisocyanate.
- 37. (Withdrawn) The method of claim 31 wherein the butadiene rubber is in the form of granules.
- 38. (Withdrawn) The method of claim 31 wherein the butadiene rubber is a mixture of granules and peelings or buffings at a ratio of 70% granules and 30% peelings or buffings.
- 39. (Withdrawn) The method of claim 37 or 38 wherein the granules are in the range of 1.5 mm to 6 mm in diameter, inclusive.
- 40. (Withdrawn) The method of claim 31 wherein the EPDM is granular, with the granules being in the range of 1.5 mm to 6 mm in diameter, inclusive.

#### COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT APPEALS AND INTERFERENCES & PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. 1.136(a) (Small Entity)

Docket No. 42635-0200

In Re Application Of: Karoleen B. Alexander

Customer No. Group Art Unit Confirmation No. Examiner Application No. Filing Date 2947 3643 10/757,116 01/14/2004 Parsley, David 21611

MULTI-LAYERED STRUCTURE FOR TREE WELL SKIRTS AND SIDEWALKS AND METHOD OF MAKING SAME

### TO THE COMMISSIONER FOR PATENTS:

This combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition for extension of time under 37 CFR 1.136(a) is respectfully submitted by the undersigned:

Dated: July 11, 2006

Albin H. Gess Registration No. 25,726

SNELL & WILMER LLP 600 Anton Blvd., Suite 1400 Costa Mesa, CA 92626 Tel. (714) 427-7020 Fax (714) 427-7799

#### Certificate of Transmission by Facsimile\*

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CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 C.F.R. §1.10)

I hereby certify that the following correspondence is being deposited with the United States Postal Service with sufficient postage as "Express Mail No. **EV 632761203 US** the Commissioner for Patents, P.O. Box 1450, Alexandria, VA

July 11

MARC FREGOSO

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CC:

APPEALS	AND IN	42635-0200								
In Re Applie	cation Of	Karoleen B. Alex	ander							
Application 10/757,1	l l	Filing Date 01/14/2004	Examin Parsley, D		Customer No.	Group Art Unit	Confirmation No.			
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COMMISSIONER FOR PATENTS:										
This is a combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition under the provisions of 37 CFR 1.136(a) to extend the period for filing an Appeal Brief.										
Applicant(s) hereby request(s) an extension of time of (check desired time period):  ☑ One month ☐ Two months ☐ Three months ☐ Four months ☐ Five months										
from:		June 11, 2006	<u> </u>	until:	<u>.</u>	11, 2006 Date				
The fee for the Appeal Brief and Extension of Time has been calculated as shown below:										
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TOTAL FEE FOR APPEAL BRIEF AND EXTENSION OF TIME: \$310.00										
The fee for	the Appe	al Brief and extensi	on of time is to be	paid as follo	ows:					
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